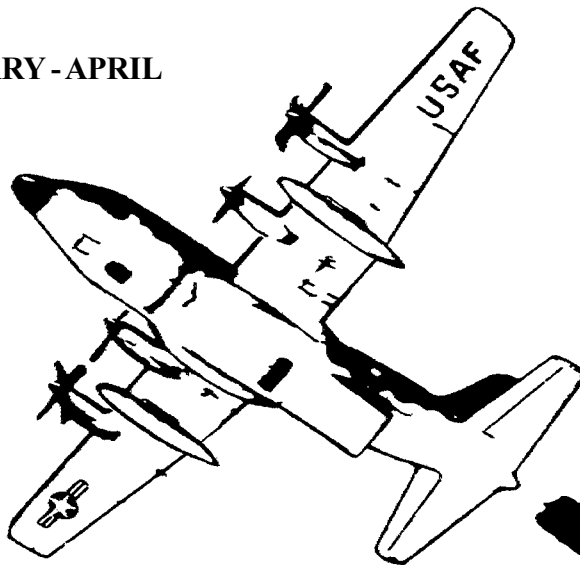


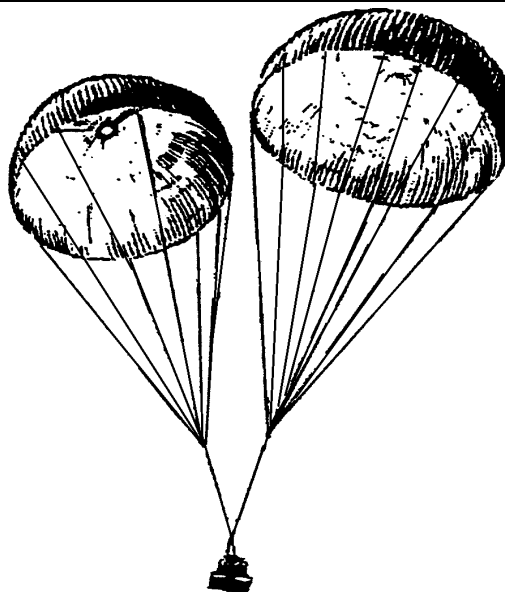
JANUARY - APRIL

VOLUME I 2000



TRIENNIAL

**AIRDROP REVIEW
AND
MALFUNCTION/SAFETY
ANALYSIS**



PREPARED BY
THE US ARMY QUARTERMASTER SCHOOL
FORT LEE, VIRGINIA 23801-1502

AIRBORNE CREED

I am an Airborne trooper! A paratrooper!

I jump by parachute from any plane in flight. I volunteered to do it, knowing well the hazards of my choice.

I serve in a mighty Airborne Force—famed for deeds in war—renowned for readiness in peace. It is my pledge to uphold its honor and prestige in all I am—in all I do.

I am an elite trooper—a sky trooper—a shock trooper—a spearhead trooper. I blaze the way to far-flung goals—behind, before, above the foe's front line.

I know that I may have to fight without support for days on end. Therefore, I keep mind and body always fit to do my part in any airborne task. I am self-reliant and unafraid. I shoot true, and march fast and far. I fight hard and excel in every art and artifice of war.

I never fail a fellow trooper. I cherish as a sacred trust the lives of men with whom I serve. Leaders have my fullest loyalty, and those I lead never find me lacking.

I have pride in the Airborne! I never let it down!

In peace, I do not shirk the dullest duty nor protest the toughest training. My weapons and equipment are always combat ready. I am neat of dress—military in courtesy—proper in conduct and behavior.

In battle, I fear no foe's ability, nor underestimate his prowess, power and guile. I fight him with all my might and skill—ever alert to evade capture or escape a trap. I never surrender, though I be the last.

My goal in peace or war is to succeed in any mission of the day—or die, if needs be, in the try.

I belong to a proud and glorious team—the Airborne, the Army, my Country. I am its chosen pride to fight where others may not go—to serve them well until the final victory.

*I am a trooper of the sky! I am my Nation's best!
In peace and war I never fail. Anywhere, anytime, in anything—
I am AIRBORNE!*

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PREFACE

The Airdrop Review and Malfunction/Safety Analysis is published by the US Army Quartermaster School in hopes that by “passing the word” the malfunction rate within the Armed Forces may be minimized. The review and analysis in this issue covers the period 1 January 2000 - 30 April 2000.

POC AND MAILING ADDRESS

The POC for Airdrop Malfunction Reports, Monthly Airdrop Summary Reports, and any other information concerning the Airdrop Review and Malfunction/Safety Analysis is Mr. Roger Hale. All correspondence for the above reports and analysis should be addressed to:

**AERIAL DELIVERY AND FIELD SERVICES DEPARTMENT
ATTN MR ROGER HALE
USA QUARTERMASTER CENTER AND SCHOOL
1010 SHOP ROAD
FORT LEE VA 23801-1502**

REPORTS AND ANALYSES

The Malfunction/Safety Review Board met at Fort Bragg, North Carolina on 24 - 25 May 2000. A breakdown of the areas in which malfunctions occurred from 1 January through 30 April 2000 follows:

<u>CATEGORY</u>	<u>QUANTITY</u>
Containers/CRRC	10
Platforms	
LVAD	13
Personnel	22

All DD Forms 1748-2 (Airdrop Malfunction Report (Personnel-Cargo)) are reviewed, and any identifying information is removed. Block 24 is annotated to include both Army and Air Force references if only one is given. No grammatical editing is done to the reports.

PERSONNEL MALFUNCTION REPORTS AND ANALYSES

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 7800 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 5200 feet	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Hollywood Jump		16. JUMPER'S POSITION IN ACFT 1 of 3	
17. TYPE PARACHUTE (Specify) MC-5	18. TYPE MALFUNCTION				19. NO. JUMPS 320
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	hung slider due to line over	
20. TYPE OF RESERVE 370 sq ft 7 cell square	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Hard pull, jumper tunneled in on EPs and became unstable. Corrected hard pull head to earth.	
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Poor body position after hard pull.	

CONTINUED ON NEXT PAGE

ANALYSIS: 1

WHAT WAS THE MALFUNCTION?

Hung slider with line over.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Poor body position.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper training objectives are met and followed.

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 490	12. SURFACE WINDS (Knots) 6	13. VISIBILITY (Feet/Miles) 7 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC4 Parachute MA230 Altimeter		16. JUMPER'S POSITION IN ACFT 1	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 2
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Suspension Line Twist	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Jumper exited the aircraft from 12,500 feet AGL. Jumper deployed his main parachute at 4000 feet AGL. Upon opening, jumper experienced suspension line twists. After he noticed he had twists, he then performed cutaway procedures and landed safely on the drop zone.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Jumper failed to perform proper procedures for line twist.</p>

CONTINUED ON NEXT PAGE

ANALYSIS: 2

WHAT WAS THE MALFUNCTION?

Incident.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Unstable/spinning.
2. Inexperience #2 jump.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper training objectives are met and followed.

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 ft AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 480 MSL	12. SURFACE WINDS (Knots) 3 Knots	13. VISIBILITY (Feet/Miles) 1 Mile/Night	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4 Parachute System MA 2-30 Altimeter		16. JUMPER'S POSITION IN ACFT 2/11	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 11
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 Jumper exited the aircraft at 12,500 feet AGL. Upon deploying the main parachute, jumper experienced a second jolt after opening shock. Jumper then noticed several broken suspension lines and performed cutaway procedures. Jumper landed safely with the reserve canopy.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 The main canopy was not recovered for 100 percent TRI. The suspected cause is a jumper in freefall hit the main canopy suspension lines breaking them.

CONTINUED ON NEXT PAGE

ANALYSIS: 3

WHAT WAS THE MALFUNCTION?

Broken suspension lines.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not given.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not enough information.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 11,145 AGL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 1875 Feet	12. SURFACE WINDS (Knots) Not Given	13. VISIBILITY (Feet/Miles) 7 Miles
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Camera to film jumpers	16. JUMPER'S POSITION IN ACFT First	
17. TYPE PARACHUTE (Specify) MT1-X	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	jmp'r departed before gm light
19. NO. JUMPS Numerous				
20. TYPE OF RESERVE N/A	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Through prior coordination between the jumpers and the camera man, the camera man was going to depart just prior to the jumpers via a prebriefed signal. After the two minute warning was called, the jumpers got in position on the ramp. At approximately 1 minute 30 seconds away from green light, the camera man departed the aircraft landing about 2 miles short of the DZ. All equipment operated properly and the jumper received no injuries.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Poor coordination between the cameraman and the jumpers on the signal to be used. The camera man (instructor/jumper) and course director accepted full responsibility for the early departure.				

CONTINUED ON NEXT PAGE

ANALYSIS: 4

WHAT WAS THE MALFUNCTION?

Premature exit

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Premature exit

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Do not jump camera with springloaded pilot parachute.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 17,500	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 200	12. SURFACE WINDS (Knots) 030/14	13. VISIBILITY (Feet/Miles) 7 Miles+	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER O2 Mask/bottles/rucksack		16. JUMPER'S POSITION IN ACFT #6 of 7	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 75
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Floating Ripcord	
20. TYPE OF RESERVE MC-4 7 cell reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper made stable exit and f/f to pull altitude at 3500 feet AGL. He initiated his pull sequence but was unable to locate ripcord. He initiated floating r/c procedures, making one attempt with negative results. As he initiated emergency cutaway procedures, he ended up in a back to earth f/f position. Prior to cutaway, his FF2 fired deploying his main canopy and catching his right arm. He performed a successful cutaway and reserve ripcord deployment with his left hand. The main parachute disengaged and the reserve deployed successfully. Jumper landed safely on the drop zone without injury to himself or equipment.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Jumper could not locate ripcord. Twilight conditions and his O2 mask may have limited his visibility. While performing floating ripcord procedures, he failed to maintain proper f/f attitude causing him to flip on his back.

CONTINUED ON NEXT PAGE

ANALYSIS: 5

WHAT WAS THE MALFUNCTION?

Floating ripcord

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improperly fit equipment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Reinforce proper wearing of equipment.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 6500 AGL	10. ACFT SPEED (Knots) 225 KIAS	11. DZ ELEVATION (Feet) 4,000 Feet	12. SURFACE WINDS (Knots) 05 Knots	13. VISIBILITY (Feet/Miles) 8+	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Combat equipment (ruck sack, weapon, LBE)		16. JUMPER'S POSITION IN ACFT 4 of 6/ 1st pass	
17. TYPE PARACHUTE (Specify) MC-4 military free fall	18. TYPE MALFUNCTION				19. NO. JUMPS 65
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE MC-4 reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY none		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper made a good diving exit off the ramp and pulled the main ripcord at 3500 feet AGL. The main canopy deployed off of jumpers back with out delay. The parachute deployed from the D-bag but did not inflate. The jumper pulled down twice on the rear risers as instructed per the EP brief from the STS checklist. After two attempts, the canopy still failed to inflate. The jumper immediately performed emergency cutaway procedures and the jumpers reserve deployed immediately. The jumper orientated to the drop zone and decided an attempt to reach impact point may cause jumper to land on a barbwire fence. Jumper chose an alternate impact point and landed with no injuries.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Suspected cause: Streamer, possibly caused by hung slider. Riggers inspected at home station and found the parachute in normal condition. Slider showed no evidence of being hung and parachute showed no sign of still being in a cigarette roll condition.

CONTINUED ON NEXT PAGE

ANALYSIS: 6

WHAT WAS THE MALFUNCTION?

Streamer

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Canopy out of bag.
2. Control lines not risers (improper).
3. Hung slider.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Training is an issue.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 9,000 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 707 Feet	12. SURFACE WINDS (Knots) 5-10 Knots	13. VISIBILITY (Feet/Miles) Clear	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER M4, Ruck		16. JUMPER'S POSITION IN ACFT #7, 1st Pass	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 84
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Opening Hesitation	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Observed 7 jumpers exit a C-130 aircraft. All jumpers maintained proper space and interval during descent. Observed jumpers deploying their MC-4s and noticed one jumper continuing his descent. Malfunction NCO observed pilot parachute swaying on jumpers back. Pilot parachute began to start what looked like normal deployment sequence. Observed line stretch and canopy starting to deploy from deployment bag. It was at this time I observed the canopy being cut away and the reserve parachute deploy properly. Upon malfunction NCO arriving at the landing site, the jumper gave the following statement, "Upon clearing I observed partial line stretch and canopy out of deployment bag. The canopy appeared to still be in a folded manner as I continued into emergency procedure actions. I performed emergency actions by reaching up, grabbing the risers and pulling down hard twice. This failed to correct the malfunction. I then performed cutaway procedures.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Parachute was not recovered to determine cause of malfunction.					

CONTINUED ON NEXT PAGE

ANALYSIS: 7

WHAT WAS THE MALFUNCTION?

Failure of main to deploy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Vacuum created/time.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper procedures are followed.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1000	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) Not Given	12. SURFACE WINDS (Knots) 0-4 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Ruck (35 lbs), LCE, Skedco, M4, NVG		16. JUMPER'S POSITION IN ACFT #3, rt door	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 6
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Static Line Injury	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY Unconscious		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

This incident occurred during a night, combat equipment jump from the door of a C-130. Jumper was suppose to be on first chalk, second pass jumping right door. However, due to time constraints, the passes were cut short and all jumpers did not make it out which pushed the jumper back to approximately the third or fourth jumper on the 4th pass. All jumpers on this fourth pass were standing at least 20 minutes and possibly as long as 40 minutes. The jumper said he remembers seeing the static line around his right arm after handing it off to the safety and attempted to throw his right arm back in order to free it. Upon exiting, the jumper said his right arm got caught up in his risers, he was spinning and his main canopy had so many twists that it was not fully inflated. Since his right arm was caught up, he activated his reserve by pulling the ripcord grip with his left thumb. The jumper stated that he does not remember the reserve opening and a few seconds later he felt what he thought was the opening shock from his main catching air and then he blacked out. Personnel found the jumper between 1 and 1 1/2 hours later still unconscious with his main canopy spread out on the ground like a normally inflated canopy and his rucksack and weapon still attached (had not been lowered). Jumper also injured his right bicep and the following day he mentioned he had a sore neck and shoulder.

CONTINUED ON NEXT PAGE

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Jumper was seriously fatigued from standing in the aircraft for such a long period. This was noted by both the jumper behind him and the safety who told him to rest his rucksack on the seat. As he was handing off his static line to the safety, the safety noticed that the jumper was severely bent over, head down and his right arm was not up. The safety yelled at him to get his head and arm up and at this point the jumper stood up erect as the safety was taking his static line. When the jumper came out of the hunched position, enough slack was created in the static line to cause him to bring his right arm through it when bringing his right arm back into the tight body position. This is when the jumper noticed the static line routed around his arm and he attempted to throw his right arm backwards in order to free it. This in turn caused him to have a bad exit and start to tumble and twist. I believe that the static line was freed by the jumper throwing his arm back, but as he continued with his exit, it got caught on some of the equipment he was wearing on the right side of his rucksack. A piece of his equipment gave way to the static line (e-tool attaching clip) and the jumper continued to fall. His main reserve had lots of twists, causing the jumper to believe that his canopy did not inflate fully. Right before the jumper landed, he attempted to activate his reserve and within seconds he landed. I do believe that by the time the jumper landed, he had a full canopy because of the way it was laid out on the drop zone. The contributing factors in this incident could include the jumper's rigged weight versus body weight, fatigue from standing for a prolonged time, jumper inexperience and a bad exit.

ANALYSIS: 8**WHAT WAS THE MALFUNCTION?**

Incident - S/L injury

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Jumper standing too long (not IAW FM 57-230) may have led to jumper's fatigue.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Reduce jumper's weight.
2. Use more door bundles.
3. Ensure proper leadership training and safety issues are followed.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Casa 212	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME		
9. ACFT ALTITUDE (Feet) 12,500 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 480 feet	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) 7 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC4 Parachute, allice pack, MA 230, alttime		16. JUMPER'S POSITION IN ACFT lift 4 4th	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 18
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Collision	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 12500 feet AGL, jumper initiated the main pull sequence at 4000 feet. Immediately after check of canopy, jumper noticed he was entangled with another jumper. After an unsuccessful attempt to clear the other jumper, he initiated cut away procedures. Jumper cleared the other canopy and landed safely with his reserve parachute.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The jumpers opened too close together and were entangled.

CONTINUED ON NEXT PAGE

ANALYSIS: 9

WHAT WAS THE MALFUNCTION?

Incident - entanglement.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Grouping - improper separate.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Reiterate training..
2. Ensure correct procedures are followed.

TAR&M/SA VOL I

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Twin Otter	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,000 AGL	10. ACFT SPEED (Knots) 90 Knots	11. DZ ELEVATION (Feet) 1,250	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7+	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None		16. JUMPER'S POSITION IN ACFT 1	
17. TYPE PARACHUTE (Specify) MC-5	18. TYPE MALFUNCTION				19. NO. JUMPS 129
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Unable to locate ripcord	
20. TYPE OF RESERVE MC-5	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Inability to locate ripcord.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Unable to locate main ripcord at pull altitude. Pull altitude set a 3,500 feet. Performing second jump of the day.</p>

CONTINUED ON NEXT PAGE

ANALYSIS: 10

WHAT WAS THE MALFUNCTION?

Malfunction - floating ripcord.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper fit.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper training procedures and wearing of equipment are followed.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 6,000 Feet AGL	10. ACFT SPEED (Knots) 125-130	11. DZ ELEVATION (Feet) 1240 Feet	12. SURFACE WINDS (Knots) 110@8	13. VISIBILITY (Feet/Miles) Unrestricted	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Slick MFF w/MC-4 parachute		16. JUMPER'S POSITION IN ACFT 2 of 4	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 225
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Hung Slider Twist	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper pulled at briefed altitude of 3,500 feet while falling stable. Had harder than the usual hard opening. Upon checking the canopy, noted about 4-6 twists with slider all the way up. The parachute appeared to have the three center cells partially inflated only. The general appearance was that it was wadded up and may not have opened even if the twists were out. Checked altimeter which read 2,600 feet. Looked at parachute again and decided was falling too rapidly to wait and bicycle out of the twist and see if canopy would fully inflate. Cut away at 2,300 feet. Reserve ripcord was floating yet had no problem executing the cutaway. Had good reserve. Landed on DZ Pl. No injuries or damage however, the main canopy was lost in a densely wooded area. We were unable to inspect the parachute.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Hung slider, twisted lines reported by jumper. Jumper did not attempt to clear the malfunction (pull down on rear riser twice) as per the JM briefing. He felt he did not have time. It appeared that he may have hurried the cut away sequence. The jump was scheduled to be at 10,000. He may have felt he had less time to deal with the malfunction because clouds forced us to lower the exit altitude. Obviously he had the same amount of time to respond because the pull altitude remained the same regardless of exit altitude.

CONTINUED ON NEXT PAGE

ANALYSIS: 11

WHAT WAS THE MALFUNCTION?

Malfunction - hung slider.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Line twists caused by instability.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper post opening procedures are briefed.

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Sky Van	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,999 AGL	10. ACFT SPEED (Knots) UNK	11. DZ ELEVATION (Feet) UNK	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) Clear
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER None	16. JUMPER'S POSITION IN ACFT UNK	
17. TYPE PARACHUTE (Specify) MC-4 Ram Air	18. TYPE MALFUNCTION			19. NO. JUMPS 281
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Broken left control line
20. TYPE OF RESERVE MC-4 Reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

All briefings and equipment check were C/W IAW proper regs. Jumper did a standard diving exit. Free-fall was uneventful. Jumper was stable during pull sequence. He reported a hard opening and upon checking his canopy he identified a broken control line on the left side, and his canopy was flying 90 degrees to that direction. While attempting to unstow his right control line, the canopy turned further and began to cause line twists. Jumper checked his altitude, which was 3,000 feet AGL, and initiated his cutaway procedures. The reserve opened without incident and the jumper landed on target.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Myself (malfunction officer) and four other parachute riggers inspected the entire MC-4 parachute assembly. Also, the rigger who had packed the parachute in question was closely watched during the entire packing process and no errors were noted. In addition, two of the rigger's parachutes were randomly pulled, unpacked, and reverse inspected, but no discrepancies were noted. We could not definitely ascertain as to what happened. The obvious is that the hard opening reported by the jumper caused the control line to break, but we cannot say what caused such a hard opening. Findings were inconclusive.

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ANALYSIS: 12

WHAT WAS THE MALFUNCTION?

Broken control line.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Material failure.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper equipment inspection procedures are followed.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT DH-6 Otter	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 10,400 AGL	10. ACFT SPEED (Knots) 90 Kts	11. DZ ELEVATION (Feet) 2500 MSL	12. SURFACE WINDS (Knots) 2-4 Kts	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Combat Equipment, Ruck sack		16. JUMPER'S POSITION IN ACFT First	
17. TYPE PARACHUTE (Specify) MT-1XS	18. TYPE MALFUNCTION				19. NO. JUMPS 22 S/L, 34 F/F
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Broken Steering Line	
20. TYPE OF RESERVE MT-1XS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Jumper was the first man in stick performing military free fall parachute training jump with combat equipment. Jumper performed stable poised exit from aircraft. Jumper proceeded through dive, executed wave off at 5,000 AGL and pulled ripcord at 4,000 AGL as briefed. Upon deployment of main canopy, the pilot parachute hesitated. Jumper attempted to clear hesitation, became unstable, and rolled on left side. This rolling action cleared the hesitation allowing the parachute to deploy. Upon canopy inflation, the parachutist experienced a hard opening that caused the left steering line to separate at the toggle setting. Jumper performed canopy controllability check and used rear risers to control canopy in accordance with emergency procedures. Jumper executed uneventful landing.					
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Poor body position.					

CONTINUED ON NEXT PAGE

ANALYSIS: 13

WHAT WAS THE MALFUNCTION?

Broken control line.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Unstable on pull.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper training objectives are met and followed.

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1,500	10. ACFT SPEED (Knots) 125	11. DZ ELEVATION (Feet) 00	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Swin fins, helmet, UDT, flare, knife		16. JUMPER'S POSITION IN ACFT JMT in door
17. TYPE PARACHUTE (Specify) Chest Reserve	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Pilot chute deployed in plane
19. NO. JUMPS 52				
20. TYPE OF RESERVE Chest Reserve	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY Possible cracks to his ribs and left wrist and abrasions to his left leg below the knee	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Reserve parachute deployed and extracted parachutist from the aircraft inadvertently without ripcord activation. Jumper was receiving rescue jumpmaster upgrade training during a day water jump using moving target procedures. Jumper was repositioning himself in the door while observing a set of release point check streamers when he observed his reserve pilot parachute deploy. He was unable to contain the pilot parachute and was subsequently extracted from the aircraft. *INJURIES: Jumper received possible cracks to his ribs and left wrist, and abrasions to his left leg below the knee. *DAMAGE: Reserve parachute container showed the ripcord handle was still in the pocket and the right grommet on the top flap had been ripped approximately halfway out. The reserve canopy was also ripped and subsequently condemned.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

While performing rescue moving target jumpmaster duties, the jumper laid down on his stomach to acquire a better aircraft alignment sight picture (line of flight from aircraft to marker smoke to target). The local review panel feels this action released enough pressure from the left ripcord pin to allow it to dislodge from the cone. As he continued his duties, the pilot parachute escaped pulling the reserve canopy from the container.

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ANALYSIS: 14

WHAT WAS THE MALFUNCTION?

Incident - Premature reserve activation.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Incorrect procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure correct procedures are followed.

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 12,500 ft AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 490 Feet MSL	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER ICRAP		16. JUMPER'S POSITION IN ACFT 1st/1st jumper
17. TYPE PARACHUTE (Specify) PD 170	18. TYPE MALFUNCTION			
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Hung Slider
19. NO. JUMPS 700+				
20. TYPE OF RESERVE Raven	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) After exiting the aircraft at 12,500 feet AGL, jumper continued with dive as planned. At 3,500 feet AGL, jumper pulled his main pilot parachute and noticed that his slider did not come down. Jumper was falling fast with a main parachute semi-square. Jumper pulled rear risers to fix the malfunction, but nothing happened. Jumper performed cutaway procedures and was under a good reserve canopy at 1,800 feet AGL. Jumper landed at designated drop zone.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) After inspecting the parachute system, the following deficiencies were found: the main slider was halfway down the suspension lines and the suspension lines were knotted up. The main suspension lines were not on proper layout prior to packing the main parachute and that was the cause of the malfunction. Jumper failed to properly inspect his six lines when he packed the main parachute. Jumper followed proper emergency procedures and landed safely.				

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ANALYSIS: 15

WHAT WAS THE MALFUNCTION?

Hung slider.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper layout procedure.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not given. (nonstandard equipment.)

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 490 feet AGL	12. SURFACE WINDS (Knots) 5 Knots	13. VISIBILITY (Feet/Miles) Unlimited
II. PERSONNEL				
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER ICRAP	16. JUMPER'S POSITION IN ACFT 1st/2d jumper	
17. TYPE PARACHUTE (Specify) PD 210	18. TYPE MALFUNCTION			19. NO. JUMPS 1000+
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	
20. TYPE OF RESERVE Raven	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None	

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 12,500 feet AGL, jumper continued with dive as planned. Jumper pulled his main pilot parachute at 2,700 feet AGL but nothing happened. Jumper checked over his shoulder for the second time and he noticed that his pilot parachute was not inflated. Jumper performed cutaway procedures and was under a good reserve canopy at 1,200 feet AGL. Jumper landed at designated drop zone.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After a 100 percent inspection, I found the main pilot parachute with a knot in it. The main bridle line had caught a portion of the pilot parachute in a knot. The malfunction was due to improper packing of the main pilot parachute by the jumper.

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ANALYSIS: 16

WHAT WAS THE MALFUNCTION?

Pilot parachute failed to inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper packing procedures (bridle line).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not given. (nonstandard equipment)

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 14,000 Feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 490 Feet MSL	12. SURFACE WINDS (Knots) 17 Knots	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4/02/Rucksack/M-16		16. JUMPER'S POSITION IN ACFT 2d Pass/ 12 Jumper	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 18
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Floating Ripcord	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

After exiting the aircraft at 14,000 feet AGL, jumper continued with dive as planned. At 4,000 feet AGL, pull altitude, jumper noticed a floating main ripcord on his first attempt to pull it. Jumper attempted to pull his main ripcord once again and missed. Jumper immediately performed a cutaway procedure. Jumper was under a good reserve canopy by 2,200 feet AGL. Jumper landed safely on designated drop zone.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After a 100 percent inspection of the MC-4 system, no deficiencies were found on the equipment. The jumper experienced a floating main ripcord and he failed to identify it prior to pull altitude. Jumper followed proper emergency procedures and landed safely on designated drop zone.

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ANALYSIS: 17

WHAT WAS THE MALFUNCTION?

Floating ripcord out of pocket.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Impoper JMPI/packing.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure proper packing procedures and rigger checks are followed.
2. Check ripcord prior to pull altitude.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT Twin Otter	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 7000 AGL	10. ACFT SPEED (Knots) 85	11. DZ ELEVATION (Feet) 720	12. SURFACE WINDS (Knots) 040/5	13. VISIBILITY (Feet/Miles) 2+	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER MC-4, FF-2, Gentex Helmet, Altimeter, Go		16. JUMPER'S POSITION IN ACFT 1/3	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS 75
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Bag lock	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Jumper executed a clean exit and proceeded to check his ripcords and his altimeter. The jumper displayed good altitude and air awareness. At 4500 feet AGL, the jumper broke off as bired. At 4000 feet AGL, the jumper cleared his air space and waved off. At 3500 feet AGL, the jumper pulled his main ripcord. The jumper noticed nothing unusual about the pull sequence, nor was his body position abnormal. After pulling the ripcord, the jumper's body position was in a head up attitude, where he noticed a bag lock. He tugged down twice vigorously on the risers. The main canopy did not deploy. The jumper immediately performed the cutaway sequence for a partial malfunction. The reserve canopy properly deployed. The jumper put "eyes-on" the cut main parachute in an attempt to mark its location for retrieval. The jumper marked the location before entering the pattern for the drop zone. The jumper entered the pattern and landed uneventfully, with the rest of the stick landing close to him. After his jump, the jumper and another individual tried to locate the parachute but they could not find it. After all jumps were completed, everyone combed the woods in an effort to find the main parachute, to no avail.</p>
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Bag lock (we could not locate the main parachute).</p>

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ANALYSIS: 18

WHAT WAS THE MALFUNCTION?

Bag lock. Parachute failed to deploy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Stows too long.
2. Incorrect retainer bands.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper procedures (cascade in line/check retainer bands) are followed.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 12,500 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 240 Feet	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Gentex, Gloves, Goggles, Altimeter		16. JUMPER'S POSITION IN ACFT 3 Pass/#1 Jump	
17. TYPE PARACHUTE (Specify) MC-4	18. TYPE MALFUNCTION				19. NO. JUMPS FF 44
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Floating Ripcord	
20. TYPE OF RESERVE MC-4	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Jumper experienced a floating ripcord and was unable to locate it. Jumper was participating in a grouping exercise with two other jumpers. The jumpers exited together from the ramp of a C-17 at 12,500 feet AGL (12,480 feet MSL). At approximately 9,500 feet, the jumper who experienced the floating ripcord, bumped against the jumper on his right side and his goggles were knocked off his eyes. The jumper stated that he could not replace them over his eyes and stayed in formation until 4,500 feet. He then turned and tracked away until 3,700 feet where he began his deployment sequence. When he looked at his main ripcord grip to grab it, he did not find it seated in the pocket. After tracing his ripcord cable housing and still being unable to find it, he initiated cut away procedures for a total malfunction. During his cutaway procedures his FF2 fired and sent his main pilot parachute between his right and left risers. The main canopy began to deploy, but the jumper was able to grasp it and place it between his legs to prevent further deployment. The pilot parachute stayed between his risers and did not interfere with the suspension lines. The jumper landed his reserve canopy safely and without injury at the intended PI.

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

A 100 percent TRI of both canopies and the harness was performed and no deficiencies were found. The MC-4 was equipped with a serviceable FF2 mounted on the main parachute and was set to activate at 2,500 feet. The FF2 was chambered after the malfunction and was serviceable and functioning properly. It was determined after taking statements from and talking with the three jumpers and the jumpmaster, that the ripcord grip was most likely dislodged due to the impact at 9,500 feet with the fellow jumper on his right side. This was not confirmed by the other jumpers however, and the jumper failed to check his equipment after the collision. At 3,700 feet when he began his activation sequence, he could not locate his ripcord grip, and verbally stated that he could not locate his ripcord cable housing either. He eventually did locate the cable housing and traced it TWICE!! Still unable to locate his ripcord grip, the jumper stated that he initiated his cut away sequence at 2,700 feet and was under a good canopy by 2,200 feet. The fact that the jumper was never able to re-seat his goggles over his eyes may have contributed to his inability to locate his ripcord grip or cable housing until he was too low.

ANALYSIS: 19**WHAT WAS THE MALFUNCTION?**

Floating ripcord.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Collision with another jumper.
2. Improper procedures (grouping).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure proper procedures are followed.
2. Ensure proper space for separation is maintained.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1000	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 573	12. SURFACE WINDS (Knots) 0-1	13. VISIBILITY (Feet/Miles) 7 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Rucksack, M1950 SAW Mod, LBE, NODs (undershirt), SAW		16. JUMPER'S POSITION IN ACFT #5, Left Door	
17. TYPE PARACHUTE (Specify) T-10C	18. TYPE MALFUNCTION				19. NO. JUMPS 22
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Broken Static Line	
20. TYPE OF RESERVE MIRPS	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY Pulled muscles in back		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Malfunction occurred during a night, combat equipment jump. Jumper was the 5th jumper, left door. Jumper weighs 195 pounds; his total rigged weight was 325-350 pounds. Jumper stated he had no problems before green light. Jumper felt he had a good approach to the door and exit. Just after exit, jumper heard/felt (he wasn't sure which) a "snapping" sound. He remembers being face down in freefall at the end of his 4 thousand count. Jumper stated after activating his reserve it did not open. He remembers hitting the end of the MIRPS about 5 times before he felt it open. After the reserve opened, he noticed severe twists and landed within "seconds". He stated he did not lower his equipment and landed on the runway tilted back at about a 45-degree angle. Jumper recovered his equipment, took his air items to the collection point, and moved to his rally point where he reported the malfunction and back pain. Jumper injured both heels and the left side of his back. The injury to his back was swelling and pain in a line from the left side of his back even with his hip bone through the bottom of his left shoulder blade.

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

At some point during approach to the door or exit, the static line routed around a piece of the jumpers equipment and was partially constricted. The static line fed through the constriction breaking the pack closing tie. When the deployment bag reached the point of constriction, it was too big to pass through and halted the deployment process. The sides of the deployment bag were pulled downward (away from the static line attachment) tearing the bag from the reinforcement web and breaking the break cord tie. At this point the jumper was momentarily towed and struck the underside of the aircraft. The sudden stoppage placed a shock load on the static line and caused it to break at the trail edge of the troop door. The injury to the jumper's back and damage located on the rucksack and harness single point release lead me to believe that the static line could have been constricted by a piece of his equipment on his left side. I do not believe that the malfunction was caused by the static line being misrouted under a riser assembly due to the damage to the jumper's equipment and the fact that neither connector link tie was broken. The parachute and equipment is being sent to Natick Labs for testing. At this point it appears that the contributing factors could include jumper's weight, fatigue, and exit. Even though the jumper's recollection of the reserve parachute activation differs, based on the video tape evidence the reserve operated correctly.

ANALYSIS: 20**WHAT WAS THE MALFUNCTION?**

Canopy failed to inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Broken static line.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Relook at equipment hooked to LBE.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT CH-47	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1,250 feet AGL	10. ACFT SPEED (Knots) 90 Knots	11. DZ ELEVATION (Feet) 596 Feet	12. SURFACE WINDS (Knots) 5-9	13. VISIBILITY (Feet/Miles) 25 Miles	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Hollywood		16. JUMPER'S POSITION IN ACFT 1st, 1st, #3	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 12
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE		
20. TYPE OF RESERVE T-10	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Hollywood jumper #3 in stick of four jumpers had possible full canopy inversion on opening. Jumper was unaware of malfunction and steered into jumper #4 of stick who was under good canopy and combat equipment. Jumper #4 was holding into wind and was hit on the left side from jumper #3 who was traveling cross wind position. Jumper 3 was higher and went through lower jumper's lines. Both jumpers deployed good reserves and landed together without further mishap.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Canopy was possibly inverted or risers connected in reverse on harness assembly. Malfunction was not noted until photos of jump were reviewed later. Canopy was not retained for inspection.

CONTINUED ON NEXT PAGE

ANALYSIS: 21

WHAT WAS THE MALFUNCTION?

Not Given.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Not Given.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Not Given.

I. GENERAL					
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.	
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 1500 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 5250 Feet	12. SURFACE WINDS (Knots) 0-2 Knots	13. VISIBILITY (Feet/Miles) Night	
II. PERSONNEL					
14. NAME (Last, First, MI), GRADE, SSAN, & UNIT		15. EQUIPMENT WORN BY JUMPER Alice Rucksack		16. JUMPER'S POSITION IN ACFT 6th of 9 man stick	
17. TYPE PARACHUTE (Specify) MC1-1C	18. TYPE MALFUNCTION				19. NO. JUMPS 50
	SEMI-INVERSION	INVERSION	CIGARETTE ROLL	OTHER (SPECIFY)	
	PILOT CHUTE	BLOWN SECTION	BROKEN SUSPENSION LINE	Broken Steering Lines (2)	
20. TYPE OF RESERVE T-10	21. RESERVE FUNCTIONED PROPERLY (If "No" explain in item 31) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		22. RESULTING INJURY None		

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)
 When jumper checked the canopy, he noticed broken lines tangled in other suspension lines. When he tried the toggle handles, he found that it was the control lines that were broken. Jumper thought he had an inverted canopy and pulled his reserve parachute. The reason he gave for pulling his reserve was that he did not have canopy control. The control lines were adjusted to the correct length.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)
 Inspection of the canopy revealed that both bridle lines were ripped off at both ends. Gores 7 and 8, section 2 has vertical burn marks on the inside of the canopy. It appears that the bridle lines may have been entangled with the damaged portion of the canopy during deployment. This may have occurred if the canopy was not flaked IAW correct procedures.

CONTINUED ON NEXT PAGE

ANALYSIS: 22

WHAT WAS THE MALFUNCTION?

Control bridle broken.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Was MWO completed on parachute. Proper pack procedures.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Insure proper procedures are followed.
2. Insure equipment is properly inspected.

CARGO MALFUNCTION REPORTS AND ANALYSES

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140 KIAS	11. DZ ELEVATION (Feet) 410	12. SURFACE WINDS (Knots) 090@13	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT Unilateral Training Load 3394 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-2/ TO 13C7-1-5	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V/8 Foot	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 600
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Deployment phase one G-12E released from M-1, 9 seconds after extraction phase. No damage to equipment.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Parachute connector had irregularities near base. Suspected cause unknown. All connectors measured and removed from service with irregularities and not in measurement range.				

CONTINUED ON NEXT PAGE

ANALYSIS: 23

WHAT WAS THE MALFUNCTION?

G-12 parachute released from M-1, 9 seconds after extraction phase.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Parachute connectors were not properly seated.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Follow appropriate inspection procedures.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy (training) 2900 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V/8 foot	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15 Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 670 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) M-1 failed to release G-12E cargo parachutes when the load contacted the ground. Platform was dragged 200 yards damaging the following: EFTC cable, right forward suspension sling, and plywood on top of load. No aircrew training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) A screw on the M-1 release arming wire guide block backed out several turns preventing the timer from free falling.				

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ANALYSIS: 24

WHAT WAS THE MALFUNCTION?

M-1 failed to release G-12E cargo parachutes when the load contacted the ground. Platform was dragged 200 yards.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Screw on the M-1 faceplate, arming wire guide backed out several turns preventing the timer from free falling.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

During inspections ensure screws are properly tightened and follow proper inspection criteria on inspection and servicing procedures.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 507	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 1503	12. SURFACE WINDS (Knots) 0	13. VISIBILITY (Feet/Miles) 12 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3100 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Locks 17, 18
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) The HE platform impacted the ground at an angle causing damage to the first two feet of the platform and the side rail. After the initial impact, the platform had enough momentum to rotate 180 degrees coming to rest upside down.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) The cause of the malfunction was a delay in the sequence of events. The extraction force transfer coupler (EFTC) latch assembly failed to release the 3 point link as designed.				

CONTINUED ON NEXT PAGE

ANALYSIS: 25

WHAT WAS THE MALFUNCTION?

HE platform impacted the ground at an angle.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Below drop altitude 550 AGL **Big factor delayed release by the latch assembly to transfer force to deployment line. Latch assembly in question as far as working parts. Coupling link bolts too tight not allowing free movement.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Brief drop altitude, aircrew back one another up.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 550 AGL	10. ACFT SPEED (Knots) 145 Knots	11. DZ ELEVATION (Feet) 289	12. SURFACE WINDS (Knots) 250 @ 10	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Training Load 3040 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V/8 Ft	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT F.S. 1015
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At the release point, the drogue parachute exited the aircraft normally then failed to fully inflate. The loadmaster then jettisoned the drogue, as the drogue was being released it fully inflated and left the aircraft.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) The reason the parachute failed to open was undetermined due to the fact that the parachute opened after being jettisoned. After further inspection of the 15 foot parachute there were no defects found.				

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ANALYSIS: 26

WHAT WAS THE MALFUNCTION?

At the release point checklist, the drogue parachute exited normally then failed to inflate. After the loadmaster jettisoned the drogue parachute, it fully inflated and left the aircraft.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Insufficient information to suspect complete cause. (possible air starvation or not enough time given for parachute to fully deploy).

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Loadmaster be made aware of correct parachute configuration.
Possibly allow 1-2 more seconds for drogue to blossom.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-5	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1900 MSL	10. ACFT SPEED (Knots) 150 Knots	11. DZ ELEVATION (Feet) Not Given	12. SURFACE WINDS (Knots) Not Given	13. VISIBILITY (Feet/Miles) Not Given

III. CARGO				
23. TYPE LOAD AND WEIGHT 23,759 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) Not Given	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 28 Foot Type V	27. TYPE PARACHUTE AND NUMBER Not Given	28. SIZE EXTRACTION/RELEASE PARACHUTE 28-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Not Given
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Aft ramp, left inboard T-roller was damaged during airdrop of 28 foot platform				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) During deployment of extraction line, the padded link between the 60-foot and 140 feet SELB hit the T-roller. This caused the T-roller to become damaged and unserviceable.				

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ANALYSIS: 27

WHAT WAS THE MALFUNCTION?

Aircraft equipment damaged during extraction phase of a HE platform.
Equipment damaged was the left inboard T-roller.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Suspecting lack of procedures for C-5.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure aircraft loadmasters follow established procedures paying particular attention to said area.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) Not Given	10. ACFT SPEED (Knots) 150 Knots	11. DZ ELEVATION (Feet) Not Given	12. SURFACE WINDS (Knots) Not Given	13. VISIBILITY (Feet/Miles) Not Given

III. CARGO				
23. TYPE LOAD AND WEIGHT 8 Foot Mass Supply Load 3800 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 8-Foot Mass Supply	27. TYPE PARACHUTE AND NUMBER G-11B	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT #3 of 3
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Extraction parachute failed to fully open and extract the load from the aircraft. After chains had been applied during the execution of the malfunction checklist the parachute did fully open. The secondary loadmaster cut the extraction parachute line away after the chains were tight. No further problems occurred.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The loadmasters told me that after the second platform left carrying the extraction parachute for the third load, the extraction parachute did deploy it just never achieved full canopy. Definitely from both loadmasters a cigarette roll. That's when they decided to secure the load with chains and cut the extraction parachute free.</p>				

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ANALYSIS: 28

WHAT WAS THE MALFUNCTION?

Extraction parachute failed to fully open and extract the load. After emergency restraint was applied, the parachute fully deployed. The extracted line was then cutaway by secondary loadmaster. Third load to go out in a sequential drop.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

The extraction parachute cigar rolled. Not enough data to make correct determination.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper documentation on malfunction review. Provide more information.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650 feet AGL	10. ACFT SPEED (Knots) 140 knots	11. DZ ELEVATION (Feet) 472 feet	12. SURFACE WINDS (Knots) 7 knots	13. VISIBILITY (Feet/Miles) 7 miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/simulated Mass Supply 2586 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 8 Foot Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #10
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute fully deployed. Load did not move. Righthand crossover pulled. Load extracted, no damage.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Lock #10 pressure checked. Checked within limits.				

CONTINUED ON NEXT PAGE

ANALYSIS: 29

WHAT WAS THE MALFUNCTION?

The load failed to exit with extraction parachute fully deployed.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Lock calibration.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Increased maintenance inspection.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 3400 Feet MSL	10. ACFT SPEED (Knots) 140 KIAS	11. DZ ELEVATION (Feet) Unknown	12. SURFACE WINDS (Knots) Unknown	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Unilateral Training 3350 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) EFTC
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 8 Foot Type V	27. TYPE PARACHUTE AND NUMBER G-12E.(2)	28. SIZE EXTRACTION/RE-LEASE PARACHUTE 15-Foot Ringslot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>During pre-slowdown checks, the loadmaster removed left hand dual rail restraint and the platform moved aft approximately 60 inches."Loose platform" emergency procedures were initiated and the airdrop was aborted. After completing the "Completion of drop" checklist, the aircrew loadmasters inspected right-hand lock #9 which had been set at 2.50. They noticed that the release spacer was not between the rollers and was pointing forward. No damage to the airdrop load or aircraft was incurred. Aircraft returned to home station and sealed until malfunction review board representatives convened at the aircraft the following day.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Undetermined. Latch test was performed on malfunctioning lock three separate times and the lock tested good each time. Aircrew loadmasters affirmed that the malfunctioning lock was inspected during the dual-rail pre-flight, after loading, JAI inspection, and at the pre-slowdown checklist.</p>				

CONTINUED ON NEXT PAGE

ANALYSIS: 30

WHAT WAS THE MALFUNCTION?

After release of left hand locks, platform moved approximately 60 inches. Load was not released. Release spacer was not between rollers.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Inadequate pre-flight of aircraft, JAI, inattention to detail during all checks from pre-flight to pre-slowdown. Lock not properly set.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Pay more attention to detail during all phases of pre-flight through pre-slowdown.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1225 AGL	10. ACFT SPEED (Knots) 145 KIAS	11. DZ ELEVATION (Feet) 319	12. SURFACE WINDS (Knots) 240 @ 4	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT SEE 21460 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-574/ TO 13C7-31-31	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 2	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER 28-Foot Type V	27. TYPE PARACHUTE AND NUMBER G-11 (5)	28. SIZE EXTRACTION/RELEASE PARACHUTE 28-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1 of 2
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Loadmaster could not see the drogue parachute. He then jettisoned the drogue following published procedures.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Loadmaster failed to install chem light on drogue line, near the drogue parachute so parachute was not visible in drogue monitor.				

CONTINUED ON NEXT PAGE

ANALYSIS: 31

WHAT WAS THE MALFUNCTION?

Loadmaster could not see drogue line and no chem light was attached to drogue line. This was an incident only.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Failure to follow procedures. Inattention to detail.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Follow checklist discipline.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-141	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 800 AGL	10. ACFT SPEED (Knots) 150 KCAS	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) 020/9	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Mass Supply 3125 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 725

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

There were four loadmasters on this flight. Two initial airdrop qual students and two instructors. Approximately 10 seconds prior to green light, the primary student lifted the red guarded switch to arm the ADS and noticed that the platform was loose and slowly rolling to the back of the aircraft. He notified the instructor, who in turn called the malfunction to the pilot. The instructor loadmasters then completed the appropriate malfunction procedures. They secured the platform approximately 300 inches aft of the original position in the aircraft. The original platform position was at FS 725 and it was secured by right hand lock #9 set at 2.2. The platform came to rest at FS 1057 on top of the extraction line deployment bag and extraction line. There was no damage to the extraction line or bag where it was bunched up underneath the platform where it stopped. The aircraft landed without further incident.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The uncommanded release of right lock number 9 prior to green light caused a loose platform condition allowing it to roll aft in the aircraft. Upon investigation of the RH lock, it was found to be unlocked but it was verified locked at the slowdown checklist by the secondary loadmaster and his instructor. All four loadmasters noticed that the platform did rock.

CONTINUED ON NEXT PAGE

ANALYSIS: 32

WHAT WAS THE MALFUNCTION?

The platform came loose 10 seconds prior to green light. Platform rolled approximately 300 inches aft. Platform was secured. Aircraft then landed without incident. **Aircraft equipment failure**

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Right lock number 9 was determined to be the cause of the malfunction. Weak spring in the lock was the cause. It had been 2 years since last inspection on this section of rail.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Crew chief should be more proactive on maintenance of aircraft. Maintenance of rail section needs to be documented and complied with.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 2400 feet MSL	10. ACFT SPEED (Knots) 145 KCAS	11. DZ ELEVATION (Feet) 1163 feet	12. SURFACE WINDS (Knots) 240/10	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Heavy Equip- ment/LVAD 3,000 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) ADS Rails
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RE-LEASE PARACHUTE 15-Foot Extraction	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 970

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

All events leading up to drogue deployment were normal. The parachute deployment mechanism (PDM) was activated approximately 15 seconds prior to green light. At this time, the PDM deployed correctly, but the loadmaster did not visually see the drogue deploy (via the drogue monitor) and activated the back-up PDM switch. Still not seeing the drogue, the loadmaster looked aft and noticed that the drogue parachute was hanging from the side of the aircraft. The loadmaster then accomplished the appropriate malfunction procedures (engaged the left locks back into the platform). Not able to retrieve the drogue or close the cargo doors, the crew elected to attempt to free the drogue, get it out into the slipstream, and jettison it over the drop zone. To accomplish this, the loadmaster released the excess drogue line from the drogue clips and tiedown rings and tossed the excess line into the slipstream. After a short delay, the excess line whiplashed enough to free the drogue parachute, but also allowed one ply of the drogue line to snag on another part of the aircraft. Shortly thereafter, the drogue parachute, now in the slipstream, deployed. The pilot directed the loadmaster to jettison the drogue. The drogue jettison link released from the tow release mechanism and followed the route of the snagged drogue line, causing the jettison link to contact the aft cargo door/fuselage during exit. The crew closed the cargo doors and recovered to home station uneventfully. Damage to aircraft was minimal.

CONTINUED ON NEXT PAGE

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The suspected cause of this malfunction is that the drogue line snagged on a part of the aircraft before or during drogue parachute deployment. What or when the drogue line snagged is not known. This initial snag is the definite cause of the malfunction, regardless of what occurred afterwards. The subsequent snag is of no surprise considering that there was 60 feet of drogue line whiplashing behind the aircraft. A follow-on investigation and report will be accomplished through Air Force safety channels.

ANALYSIS: 33

WHAT WAS THE MALFUNCTION?

Drogue parachute failed to deploy from C-17 (PDM).

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Could have been excess slack in extraction line from the extraction link to the first clip (drogue line securing clip).
2. Improper rigging.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Remove excess slack.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training 2700 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 650 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #9, setting 2.50. No damage, no training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock #9 tested IAW 33D2-37-9-1, lock released at 51.7 ft lbs.				

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ANALYSIS: 34

WHAT WAS THE MALFUNCTION?

Extraction parachute deployed and inflated. Load failed to extract. Load extracted after loadmaster placed right hand control handle to the emergency position.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Possible stuck lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Try using other than lock 9 and 10. These locks are used excessively for heavy equipment airdrop. Maybe two locks at less settings. Have locks checked more often.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HE Training 2600 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 650 C/B
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Extraction parachute deployed and inflated, but load failed to extract. Load extracted after loadmaster placed right hand control handle to the EMERGENCY position. Right lock #9, setting 2.50. No damage, no training lost.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Right lock #9 failed pressure check, lock replaced.				

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ANALYSIS: 35

WHAT WAS THE MALFUNCTION?

Extraction parachute deployed and inflated. Load failed to exit. Right hand locks removed by loadmaster.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Over usage of the same lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Vary locks from time to time.
2. Use different # of locks at less pressure.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1216 Feet AGL	10. ACFT SPEED (Knots) 145 KCAS	11. DZ ELEVATION (Feet) 1163 Feet	12. SURFACE WINDS (Knots) 2 Knots	13. VISIBILITY (Feet/Miles) 540/5

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 900 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 2	
26. TYPE PLATFORM/AIR-DROP CONTAINER Double A-22	27. TYPE PARACHUTE AND NUMBER G-12E(1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 68-Inch Pilot Parachute	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT GRM #4
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>The malfunctioning container was the first to exit the aircraft in a stick of two. The G-12E failed to deploy, causing the container to freefall to the ground. The only damage incurred was the destruction of a previously condemned ATV motorcycle. No dollar value is associated with the damage. Drop zone personnel reported visually acquiring the container at approximately 300 feet AGL as it was rolling upside down. It appeared that the G-12E was still attached to the container, but the 68-inch pilot parachute appeared to be starved for air, thus not inflating. They also reported that the pilot parachute deployment line seemed to be entangled around the suspension webbing. The container impacted the ground upside down on the drop zone and then bounced right side up.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>The suspected cause of the malfunction was the failure of the 68-inch pilot parachute to inflate, which prevented the deployment of the main parachute. After inspecting the load, it was apparent that the pilot parachute deployment line was in fact entangled around the suspension webbing, not allowing the deployment line to fully elongate. With the pilot parachute held so close to the container, there was no chance for the pilot parachute to get enough air to inflate. We suspect that the container must have twisted, rotated, or tumbled upon exit, causing the entanglement of the deployment line and suspension webbing.</p>				

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ANALYSIS: 36

WHAT WAS THE MALFUNCTION?

68-inch pilot parachute failed to deploy.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. 68-inch pilot parachute breakcord tie not present or wrong material.
2. Bundle tumbled on exit.
3. Possible entanglement with pilot parachute static line.
4. Deployment line entangled with suspension webs.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Pack pilot parachute IAW manual.
2. Make correct breakcord tie.
3. Develop inspection checklist to inspect pilot parachute.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1234 MSL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 426	12. SURFACE WINDS (Knots) 340/6	13. VISIBILITY (Feet/Miles) 7+

III. CARGO				
23. TYPE LOAD AND WEIGHT A22 CDS HI V 1280 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A22	27. TYPE PARACHUTE AND NUMBER 26-Foot HV	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 690

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

Crew noticed no problems with drop. Crew was recalled after DZST notified CP that the load burned in. At the drop zone it was noted that a parachute panel had been torn and they thought it was caused by the aircraft.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

After landing, the crew discovered part of the parachute caught in the right forward edge of an aircraft panel just forward of the beaver tail. This area had a repair patch and probably caused the parachute to get caught in it. Minor aircraft damage happened by the force of the parachute pulling on it.

CONTINUED ON NEXT PAGE

ANALYSIS: 37

WHAT WAS THE MALFUNCTION?

26-foot HV parachute failed to deploy and inflate.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Parachute canopy caught and tore on aircraft tail forward of the beaver tail. A patch repair was performed in this section of the tail.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Insure proper maintenance procedures to aircraft.
2. Insure all patch repairs have a smooth surface.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT MC-130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 500 Feet AGL	10. ACFT SPEED (Knots) 230 KCAS	11. DZ ELEVATION (Feet) 190 Feet MSL	12. SURFACE WINDS (Knots) 10 KTS	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT HSLADS 390 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-542/ TO 13C7-51-21	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) SEDS
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-21 Modified	27. TYPE PARACHUTE AND NUMBER 22-Foot Ringslot(1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 727
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) On the run-in to a HSLADS airdrop, the load inadvertently exited the aircraft prior to release point. During opening of the ramp and door (3-minute warning), the SEDS sling began to elongate. Once the sling was approximately 3/4 elongated, the modified MA-4A bombrack released. Under tension from the SEDS sling, the load traveled aft and exited the aircraft 11 miles short of the DZ. At the time of the release, the ramp and door was not yet in the ADS position (cargo door had just locked into the cargo door uplocks and the ramp was approximately 8-10 inches from the ADS position). The crew immediately marked the coordinates of the incident and returned to home station. All airdrop equipment was left in its original position and the aircraft immediately inspected upon landing.				

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Inspection of the aircraft and MA-4A bombrack revealed that both bombrack fangs had released. At the time of the release, both flight deck airdrop override switches were in "OVERRIDE", the ramp/door was not in the ADS position, the SRS arming switch was dearmed, and the green light was not illuminated (all of these preconditions must be present for a mission computer directed release). The MX investigation determined that there were no abnormalities with the aircraft's electrical release system and the bombrack met or exceeded electrical and mechanical bench tests. Although the exact cause of this malfunction remains unclear, the investigative team concluded that the most likely cause was an inadvertent manual release of the bombrack. The bombrack manual release lanyard on this particular bombrack was approximately 30 inches long and as it was laying on the floor may have caught on a floor stud or immediate roller conveyor. During a re-creation of the event on the ground, the investigative team managed to release the bombrack by wrapping the lanyard around a litter stanchion attachment stud located directly below the bombrack (D column). When pressure was applied to the load/bombrack (sling elongating), the lanyard pulled tight and released the bombrack. The investigative team believes that the excessive length of the manual release lanyard may have directly contributed to the early release of the load.

ANALYSIS: 38

WHAT WAS THE MALFUNCTION?

Premature release of bombrack.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Inadvertant manual release misrouted or snagged manual release lanyard.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Standardize manual release lanyard.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 600 feet AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 262 Feet	12. SURFACE WINDS (Knots) 10 Knots	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS x 1 1000 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 700

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

During the drop sequence within the aircraft, all procedures were accomplished and the CDS bundle exited the aircraft normally. The secondary loadmaster observed the pilot parachute open during the deployment phase, then separated from the bundle. He stated that he never saw the G-12 parachute open. The malfunction NCO on the DZ also observed the 68 inch pilot parachute separate from the bundle and the CDS impacted the ground as the G-12 failed to deploy. Upon inspection of the CDS load and parachute, the bridle loops on the cargo bag and connection to the G-12 parachute showed no signs of deployment force or wear. The 68-inch pilot parachute's main deployment line was still attached to the G-12 bag, with signs of broken stitching on the lower end of the deployment line loop. At the top end of the main deployment line, the stitching that forms the loop and stowage for the connector link was completely ripped. The pilot parachute descended into the top of a tree beyond safe reach. There will be a second attempt at recovery with the proper equipment.

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The interview with aerial port personnel revealed that the 68-inch pilot parachutes main deployment line was locally manufactured. Further investigation and comparison to a new factory deployment line, revealed that there was inadequate and improper stitching on the upper and lower loops. The improper stitching/material failure on the locally manufactured deployment line seemed to have been the cause of separation when the pilot parachute fully inflated and attempted to deploy the G-12. There was an equipment loss of 4 x plastic barrels, one 68-inch pilot parachute, and CDS skidboard.

ANALYSIS: 39

WHAT WAS THE MALFUNCTION?

Pilot parachute separated from the load.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper stitching used on a locally manufactured deployment line.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Follow proper stitch formation while sewing.
2. Receive authorization to fabricate deployment line.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 550 feet AGL	10. ACFT SPEED (Knots) 145 KCAS	11. DZ ELEVATION (Feet) 1175	12. SURFACE WINDS (Knots) 6 knots	13. VISIBILITY (Feet/Miles) 7 miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 1420 lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 68-inch pilot parachute	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 1035
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) There were a total of two containers to be dropped on this pass. At green light, GRM #3 released and the bundles began to roll aft. The first bundle exited the aircraft normally. As the second container transitioned the ramp hinge, it tipped over and landed on the ramp (skid board facing forward). The cargo doors were closed, bundle secured, and the aircraft returned to home station without further incident.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Although a definite cause was not determined, a pilot observer stated that it appeared that the skid board contacted the first inboard logistic rail on the ramp, causing the container to tip. Skid board dimensions were 47 3/4 inches wide X 48 inches long. Post flight inspection of the bundle revealed no damage to the container.				

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ANALYSIS: 40

WHAT WAS THE MALFUNCTION?

Load tipped over inside the aircraft. Number of containers 1 actual 2.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Uncommanded up on the ramp.
2. Loose skid board ties.
3. High center of gravity of bundle turbulence.
4. Skid board was 47 3/4 width by 48 length.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Ensure skid board ties are tight.
2. Ensure bundles loaded straight.
3. Ensure that release gate does not twist bundle.
4. Need more info.
5. C-17 skid board dimensions 48 x 48 but tight fit when loaded.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 450 AGL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 443 MSL	12. SURFACE WINDS (Knots) 030@06	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 840 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 486

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

At green light, the left static line retriever operated for 2 seconds, then shut off. The gate failed to cut and the load failed to exit the aircraft. No damage was incurred.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Upon maintenance inspection, one of the electrical wires for the power supply for the timer was connected by only a couple of strands of the wire. This condition would cause intermittent operation of the timer. Inspection of the impounded aircraft with the static line retriever cable taut, the upper beaded chain was very slack. Both chains measured 4.75 inches. This denotes an upward pull. This condition in conjunction with the take up limit switch gap of 0.046 inches were also suspected contributing factors to the early shut off of the static line retriever winch.

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ANALYSIS: 41

WHAT WAS THE MALFUNCTION?

Gate failed to cut (western gear).

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Timer wiring frayed.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Fix wire.
2. Install periodic inspection procedures.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 400 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 43	12. SURFACE WINDS (Knots) 4	13. VISIBILITY (Feet/Miles) 7

III. CARGO				
23. TYPE LOAD AND WEIGHT Low Vel CDS 1500 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER 48 x 48 A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 600
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right side static line retriever winch (SLR) failed to cut the gate and the 80 pound tie and the load failed to exit the aircraft. The winch momentarily stopped and then cut off. No damage occurred. The retriever was a western gear. The knife was sharp and not caught on anything. The 80 pound tie did not break. Pulley location was FS 617. The gate location was FS 600. The serial number of the winch was 1429 and it was last inspected on 17 Apr 00 and was overhauled on 1 Feb 00. The compression spring was in good condition.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Western gear static line retriever failed to cut gate. Suspected cause is a bad winch. Maintenance tested and winch worked fine. Maintenance removed and replaced with another static line retriever winch.				

CONTINUED ON NEXT PAGE

ANALYSIS: 42

WHAT WAS THE MALFUNCTION?

Gate failed to cut (western gear).

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Limit switch/winch.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Install periodic inspection procedures.
2. Replace western gear.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 1000	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) Not Given	12. SURFACE WINDS (Knots) 10-13	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT 2 round Javelin 145 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-552/ TO 13C7-22-61 Chapter 6	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) Door Bundle
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-7A	27. TYPE PARACHUTE AND NUMBER Reserve Cargo (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 1

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The load was rigged in the rigger facility and moved to the departure airfield. The A-7A straps had loosened in transit and were retightened prior to being loaded onto the aircraft. The load was positioned upright in the AC and restrained by a CGU-1/B strap routed over the top of the load. As the jumpmasters were preparing the load in flight they noticed the straps were loose, but they did not think they were excessively loose. The bundle was moved into the door twice but brought back inside the plane due to no-drops being called. As the load was being retrieved the second time, one A-7A strap slipped off the bottom. The jumpmasters fixed the strap during the racetrack and ejected the bundle on the next pass. The bundle momentarily jammed in the door before exiting. Observers on the ground saw the bundle and parachute separate as the parachute was inflating. The parachute drifted off the trail edge of the drop zone and could not be found. The load impacted on the DZ and was destroyed. The only components of the bundle (other than the parachute) that were not located with the load were the four A-7A straps used to hold and suspend the load. I suspect that the four straps are still connected to the parachute. Statements indicate that the honeycomb at the bottom of the load was taped together instead of being glued.

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32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

Without the parachute the cause is speculative. Two possible causes are that the load loosened and was able to come out of the A-7A straps, or that one or more of the A-7A straps was damaged by dragging the bundle on the tarmac, or the nonskid surface on the AC, causing them to break. The bundle could have become loose due to the CGU-1/B compressing the small pieces of honeycomb at the bottom of the load allowing them to slip out after exit since they were not glued down. The A-7A strap may not have been routed through the friction adapter correctly.

ANALYSIS: 43

WHAT WAS THE MALFUNCTION?

Bundle (Javelin) separated from parachute.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Improper routing of A-7A straps through friction adapter.
2. Dragging of load across ground caused straps to become loose/cut.
3. Crushed honeycomb allowed for loose straps.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Route A-7A straps through friction adapter properly.
2. Replace 7 inch x 7 inch honeycomb with honeycomb same size as skidboard.
3. Glue 7 inch x 7 inch honeycomb to skid as prescribed by FM.
4. Make cutouts in skid board to accommodate straps.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT MC-130H	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 250 AGL	10. ACFT SPEED (Knots) 213 IAS	11. DZ ELEVATION (Feet) 5550	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Multi-HSLLADS 380 X 2	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-542/ TO 13C7-51-21	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) High Velocity
		NO. PLATFORMS	NO. CONTAINERS 2	
26. TYPE PLATFORM/AIR-DROP CONTAINER Not Given	27. TYPE PARACHUTE AND NUMBER 22-foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Aft edge 735
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Multi HS drop. During the deployment phase, the 22-foot parachutes entangled allowing only one parachute to inflate. On impact of the ground, one bundle rolled up in its parachute. Inspection of aircraft, sling, and D-bags were all good. Only damage was five broken suspension lines on one parachute and two skidboards.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) During deployment, 22-foot ring slot parachutes got entangled, one parachute picking up both loads. Opinion of a/d group stan eval-no errors on crew or riggers.				

CONTINUED ON NEXT PAGE

ANALYSIS: 44

WHAT WAS THE MALFUNCTION?

Parachute failed to open.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Parachute tangled around load.
2. Anchor cable stop too close inside aircraft.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Move anchor cable stop.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 784	10. ACFT SPEED (Knots) 145	11. DZ ELEVATION (Feet) 1532	12. SURFACE WINDS (Knots) 322@6	13. VISIBILITY (Feet/Miles) 10 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 675 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11 Chapter 8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E(1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 1086

31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)

The primary loadmaster was at the aft panel upon initiation of green light. After the gate released from the gate release mechanism, the bundle rolled a couple of inches and stopped. The loadmaster proceeded to accomplish the malfunction procedures and when he bumped the bundle, the bundle began rolling aft. The bundle stopped once again and the bundle was secured in place. The aircraft landed without incident.

32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)

The bundle weighed 675 pounds. The skid board measured 47 3/4 inches x 48 inches. The pilot parachute was facing forward in the airplane. The 47 3/4 inch side was in the rails leaving a gap of about 1/4 inch. During the aircraft rigging process, the loadmasters put the forward restraint gate on first and then put on the aft release gate. This allowed the skid board to twist in the rails as the gates were being tightened. Unfortunately, the corner of the skid board lined up perfectly with the handle hole in the logistic system at FS 1000. The twisting of the bundle allowed for a very small portion of the board to project through the hole and when the gate released, it moved aft and rested on the aft side of the opening. This would explain why the bundle began moving again by the slightest bump. There was an indentation and rub marks on the board that matched perfectly to the rail handle hole.

CONTINUED ON NEXT PAGE

ANALYSIS: 45

WHAT WAS THE MALFUNCTION?

Load failed to exit.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

1. Load shifted during loading of bundle or during installation of release gate.
2. Skid board 1/4 inch too short.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Cut skid board to specifications.
2. When cutting plywood for skid boards, place factory edge towards rails.
3. Use 1-inch skid boards for C-17.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 733	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 167	12. SURFACE WINDS (Knots) 240/4 G 7	13. VISIBILITY (Feet/Miles) Clear/7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Water barrels CDS 1378 LBS	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS	NO. CONTAINERS 2	
26. TYPE PLATFORM/AIR-DROP CONTAINER CDS	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 737
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>Suspension webs were not attached to parachute clevis, causing the G-12 to depart the CDS and cause the malfunction. The CDS impacted the drop zone 400 yards at 12 o'clock from the PI with little or no damage to the drop zone. The CDS was not salvageable.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Improper before loading JAI. The after loading JAI is no longer required to check that the parachute clevis is attached to the load. If this item (12, A, 6) was still on the 1748-1, it might not have been overlooked.</p>				

CONTINUED ON NEXT PAGE

ANALYSIS: 46

WHAT WAS THE MALFUNCTION?

Parachute separated from the load.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Suspension webs not attached to parachute clevis.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Follow proper rigging procedures.
2. Reinstate inspection of clevis during/after loading JAI.

AIRCRAFT MALFUNCTION REPORTS AND ANALYSES

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 2740 MSL	10. ACFT SPEED (Knots) 130 KIAS	11. DZ ELEVATION (Feet) 1424 MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 2 Square Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT A-22 CDS Water Barrels x 4 800 LBS each	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11 Chapter 8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 2	Non-CVR
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22 CDS (Non-CVR)	27. TYPE PARACHUTE AND NUMBER 26-Foot Hi V (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 557
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At green light, the western gear retriever ran for approximately 1 1/2 seconds and then shut off without breaking the 80 lb safety tie. The loadmaster stated that there was no turbulence encountered at the time of drop.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) This malfunction involved the right hand western gear static line retriever. During our inspection of the retriever, we found that the compression spring was in good condition, the beaded chains were symmetrical at 4 1/8 inch, the retainer cup was seated, the limit switch screw was safetied, and the limit switch gap was within limits at .013 inches. The pulley was rigged at FS 617, release gate at FS 607, and the load C/B was at FS 557. The release gate was tight and the retriever cable had approximately 2 1/2 inches of slack. In conclusion, we found that this malfunction was due to the activation of the current limit switch due to the angle on the cable. MAINTENANCE FINDINGS: Slip clutch pull test resulted in 1500 pounds of pull; the winch is within limits.				

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ANALYSIS: 47

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Limit switch on western gear.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Perform continuous inspections.
2. Monitor and document problems.
3. Replace/get rid of western gear.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 600 A	10. ACFT SPEED (Knots) 140 IAS	11. DZ ELEVATION (Feet) 335	12. SURFACE WINDS (Knots) 200/30	13. VISIBILITY (Feet/Miles) Unrestricted

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 22805 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS	NO. CONTAINERS 12	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT 6 of 6 rt side
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Release gate cut, load failed to exit (rt side only bundle 6 of 6). All bundles on both sticks were noticed that they exited slower than usual. The last 3 bundles to exit on the right stick moved very slowly, the second bundle slowed even more as it exited, the third only moved approximately 2-3 feet and stopped.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) A push-pull was performed on the bundle and it did not bind in the CVR system at any point. All aircraft equipment was in serviceable condition to include rails, rollers. Suspected cause due to the slow exit of all bundles is the aircraft deck angle.				

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ANALYSIS: 48

WHAT WAS THE MALFUNCTION?

Load failed to exit aircraft.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Improper aircraft deck angle.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure pilot maintains proper deck angle during airdrop.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/MASS 2682 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #9
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right hand cross over pulled. Extraction parachute good fully inflated. Lock #9 set @ 2.5. No damage incurred.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Lock pressure checked, failed check. Lock removed and replaced.				

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ANALYSIS: 49

WHAT WAS THE MALFUNCTION?

Right hand lock #9 failed to retract. Was manually released.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Track lock failures.
2. Ensure periodic inspections are performed on all locks.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 639 feet MSL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) Not Given	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Clear

III. CARGO				
23. TYPE LOAD AND WEIGHT A-22 CDS 800 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) High Velocity
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22 CDS Barrel Load	27. TYPE PARACHUTE AND NUMBER 26-Foot High Velocity (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 500
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Static line restrainer winch failed to activate.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Static line retriever checked out on preflight. ADS system was tested and found to be interminant. Aircraft electric shop suspects a bad relay.				

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ANALYSIS: 50

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Talley switch.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Perform continuous inspections.
2. Monitor and document problems.
3. Ensure periodic inspections on equipment are performed.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 500 AGL	10. ACFT SPEED (Knots) 130 Knots	11. DZ ELEVATION (Feet) 4008 MSL	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT A-22 CDS 780 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER Not Given	27. TYPE PARACHUTE AND NUMBER G-14 (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 700
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) At green light retriever winch activated for approximately 1 to 1.5 seconds and cut off. Cable and knife were tight against release gate. Safety tie did not break. Gate failed to cut. Emergency procedures were accomplished with no other errors encountered.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Western gear retriever winch (with slip-clutch) shut-off switch was rigged out of limits and shut off when under load condition. Preflighted with no load condition and operated IAW TO 1C-130E(H)-1.				

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ANALYSIS: 51

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Limit switch on western gear.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Perform continuous inspections.
2. Monitor and document problems.
3. Ensure periodic inspections on equipment are performed..

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 472	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT CDS 3968 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 4	CVR
26. TYPE PLATFORM/AIR-DROP CONTAINER A-22	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 517
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Double stick CDS with CVR (4 bundles). Left hand gate cut, 2 bundles released. Right gate failed to cut, bundles failed to exit. Right hand winch was used due to an inop. left hand winch.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Suspected cause: The limit switch was activated when the first gate cut. Reporting guide info: Right retriever, spring condition was good. Beaded chains were within limits and equal length, limit switch gap (checked by maint) was in limits, pull test was c/w tested @ 1600 pounds, the winch ran approximately 3.5 seconds, 80 pound tie broke on the left side and not on the right (cable was tight and did not appear to have slipped, knives were sharp, pulley @ FS 550, gate @ 578, last inspected by maintenance - unknown.				

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ANALYSIS: 52

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Limit switch on western gear.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Perform continuous inspections.
2. Monitor and document problems.
3. Replace/Get rid of western gear

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 140	11. DZ ELEVATION (Feet) 590	12. SURFACE WINDS (Knots) 7 Knots	13. VISIBILITY (Feet/Miles) 7 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT HE/Mass 2638 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		<input checked="" type="checkbox"/> DUAL RAIL	<input type="checkbox"/> CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V	27. TYPE PARACHUTE AND NUMBER G-12E (2)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ringslot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT Lock #9
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right hand cross over pulled. Extraction parachute good, fully inflated.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Lock #9 pressure checked. Failed check. Lock replaced.				

CONTINUED ON NEXT PAGE

ANALYSIS: 53

WHAT WAS THE MALFUNCTION?

Right hand lock #9 failed to retract. Was manually released.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Bad lock.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Track lock failures. Ensure more inspections of all locks.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-17	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 550 AGL	10. ACFT SPEED (Knots) 180 Knots	11. DZ ELEVATION (Feet) Not Given	12. SURFACE WINDS (Knots) Calm	13. VISIBILITY (Feet/Miles) Unlimited

III. CARGO				
23. TYPE LOAD AND WEIGHT Training Load 3500 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-512/ TO 13C7-1-8	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS 1	NO. CONTAINERS	
26. TYPE PLATFORM/AIR-DROP CONTAINER Type V 8-foot Platform	27. TYPE PARACHUTE AND NUMBER G-14E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE 15-Foot Ring Slot	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 700
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Lost airdrop logic after initiation of the release point checklist. Called malfunction and jettisoned the drogue.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Maintenance stated that two release mechanism was out of adjustment.				

CONTINUED ON NEXT PAGE

ANALYSIS: 54

WHAT WAS THE MALFUNCTION?

Lost airdrop logic system.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Tow release mechanism out of adjustment.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Ensure proper installation and adjustment of tow release mechanism.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION	8. DATE AND TIME	
9. ACFT ALTITUDE (Feet) 650 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 400	12. SURFACE WINDS (Knots) 280/10	13. VISIBILITY (Feet/Miles) 5 Miles

III. CARGO				
23. TYPE LOAD AND WEIGHT Hi V CDS 920 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain) CVR
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER A-21	27. TYPE PARACHUTE AND NUMBER 26-Foot Ring Slot (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 700
<p>31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.)</p> <p>C-130 dropping one Hi-V CDS weighing 920 lbs. At green light, the right static line retriever activated but failed to break the 80 lb tie, preventing gate release. CVR section 3 was used, pulley at FS 617. A malfunction was called and the crew RTB. Spring condition was good, beaded chains were 4 3/4-inches and equal length, cup was seated, knife was sharp.</p>				
<p>32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.)</p> <p>Bundle consisted of stacked ammo boxes with a layer of honeycomb between each box. At green light as tension was applied to the release gate, it slid down between two boxes and crushed in the honeycomb. Suspected cause was NO solid barrier for the type XXVI gate thus causing the tension to spread to the honeycomb instead of the ammo boxes.</p>				

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ANALYSIS: 55

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Release gate slid down between ammo boxes and crushed in honeycomb.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

Place a solid barrier (plywood) between load and under the cover.

TAR&M/SA VOL I

I. GENERAL				
1. UNIT BEING AIRLIFTED	2. DEPARTURE AIRFIELD	3. DATE	4. TYPE ACFT C-130	5. ACFT SER NO.
6. OPERATION/EXERCISE		7. DZ AND LOCATION		8. DATE AND TIME
9. ACFT ALTITUDE (Feet) 400 AGL	10. ACFT SPEED (Knots) 130	11. DZ ELEVATION (Feet) 43	12. SURFACE WINDS (Knots) 4	13. VISIBILITY (Feet/Miles) 7

III. CARGO				
23. TYPE LOAD AND WEIGHT Low Vel CDS 1500 Lbs	24. RIGGED IAW (TM/TO/NAVAIR No.) FM 10-500-3/ TO 13C7-1-11	25. AERIAL DELIVERY SYSTEM USED		
		DUAL RAIL	CDS RELEASE GATE	OTHER (Explain)
		NO. PLATFORMS	NO. CONTAINERS 1	
26. TYPE PLATFORM/AIR-DROP CONTAINER 48 X 48 A-22	27. TYPE PARACHUTE AND NUMBER G-12E (1)	28. SIZE EXTRACTION/RELEASE PARACHUTE	29. LENGTH OF REEFING LINE	30. POSITION OF LOAD IN AIRCRAFT FS 550
31. DESCRIPTION OF MALFUNCTION/FAILURE/ DAMAGE INCURRED (if more space is needed, continue on reverse.) Right side static line retriever winch (STLRW) failed to cut the gate and the 80 lb tie and the load failed to exit the aircraft. The winch momentarily stopped and then cut off. No damage occurred.				
32. CAUSE OF MALFUNCTION/FAILURE (If more space is needed, continue on reverse.) Western gear static line retriever failed to cut gate. Suspected cause is a bad winch. Maintenance tested and winch worked fine. Maintenance removed and replaced with another static line retriever winch.				

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ANALYSIS: 56

WHAT WAS THE MALFUNCTION?

Gate failed to cut.

WHAT COULD HAVE CAUSED THIS TO HAPPEN?

Limit switch on western gear.

WHAT SHOULD YOU DO TO KEEP THIS FROM HAPPENING?

1. Perform continuous inspections.
2. Monitor and document problems.
3. Replace/Get rid of western

**SUMMARY OF
SUPPLY AND EQUIPMENT DROPS**

1ST TRIANNUAL CY 2000

	PLATFORM LOAD		SINGLE CONTAINER		CDS		TOTAL	
Number of Drops	2125		292		2159		4576	
Number of Malfunctions	13		3		8		24	
Percentage of Malfunctions	0.61		0.10		0.38		0.52	
Malfunction Phases:	IP	EF	IP	EF	IP	EF	IP	EF
Extraction	0	11	0	0	0	12	0	23
Deployment-Recovery	2	1	1	0	2	3	5	4
Release	1	0	0	0	0	0	1	0

IP-Incorrect Procedures

EF-Equipment Failure

**SUMMARY OF
PERSONNEL PARACHUTE JUMPS**

1ST TRIANNUAL CY 2000

		C-17	C-130	C-141	OTHER	TOTAL
Nonmaneuverable	Number of Deployments	2,981	16,469	13,099	1,137	33,686
	Number of Malfunctions	0	3	0	0	3
	Percentage of Malfunctions	0.00	0.019	0.00	0.00	0.009
Maneuverable	Number of Deployments	5	4,791	428	4,334	9,558
	Number of Malfunctions	0	1	0	1	2
	Percentage of Malfunctions	0.00	0.02	0.00	0.02	0.02
Free-Fall	Number of Deployments	41	1,833	49	1,960	3,883
	Number of Malfunctions	1	11	0	5	17
	Percentage of Malfunctions	2.4	0.6	0.00	0.25	0.43
Total	Number of Deployments	3,027	23,093	13,576	7,431	47,127
	Number of Malfunctions	6	15	0	6	27
	Percentage of Malfunctions	0.20	0.064	0.00	0.08	0.057

**SUMMARY OF
PERSONNEL PARACHUTE MALFUNCTIONS**

1ST TRIANNUAL CY 2000

	NON- MANEUVERABLE	MANEUVERABLE	FREE-FALL	RESERVE
Number of Deployments	33,686	9,558	3,883	28
Number of Malfunctions	3	2	17	0
Towed Jumper	0	0	0	0
Broken Static Line	0	0	0	0
Entanglement	0	1	2	0
Failed to Inflate	0	0	2	0
Inversion	0	0	0	0
Pilot Chute	0	0	0	0
Semi-inversion	0	0	0	0
Suspension Lines	0	0	2	0
Other	3*	1	12	0
Percentage of Malfunctions	0.90	0.20	0.43	0.00
Fatalities	0	0	0	0

*Injuries

**INJURIES OCCURRING ON PARACHUTE OPERATIONS
AS REPORTED ON DA FORM 285**

1 OCTOBER - 31 DECEMBER 1999

	C-17	C-130	C-141	UNKNOWN	TOTAL
PLF-Related Injuries	0	1	4	43	48
Main Malfunction	0	0	0	0	0
Misrouting of Static Line	0	0	0	4	4
Entanglements	0	0	0	1	1
Tree Landings	0	0	0	2	2
In Aircraft	0	0	0	0	0
Hazards on Drop Zone	0	0	0	0	0
Other	0	1	1	4	6
Insufficient Information	0	0	0	1	1

AIRCRAFT MALFUNCTIONS

These malfunction reports are not included in the statistical data nor reflected in the percentage of malfunctions. All aircraft systems malfunctions which may have led to an abort or no-drop are constantly reviewed and analyzed for repeat or recurring trends and solutions. Corrective actions are recommended through Air Force maintenance systems.

PERSONNEL DROPS	
Improperly operating doors or ramps	0
Static line retriever	0
SUPPLY AND EQUIPMENT DROPS	
Rail locks	7
Improperly operating ADS	1
Improperly operating doors or ramps	0
Release mechanism	1
Electrical system	0
CONTAINER DROPS	
Rollers	0
Type XXVI gate	1
Static line retriever	7
Center Line Vertical Restraint (CVR)	0
TOTAL	17

HOT POOP

1.